

## Claims

1. A headlight unit for single-track two-wheeled vehicles, especially motorcycles, motor scooters or the like, which experience an inclination around their longitudinal axis (X) while negotiating curves, comprising:

a sensor-controlled correction device for the light-beam pattern generated by the dipped low beam, and

at least one central headlight (23) for straight-ahead driving and with lateral headlights (22, 24), one disposed on the right and one on the left thereof, in that, for illumination in left-hand curves and for illumination in right-hand curves respectively, the right headlight (22) and the left headlight (24) respectively are mounted in such a way that they are turned downward around their optical axis by an angle ( $\beta$ ) to compensate for inclination, thus causing the outside rims remote from the central headlight (23) to be out of horizontal orientation, and in that the correction device includes an electronic control unit, which turns on at least the central headlight (23) within a driving stretch for substantially upright driving and, during negotiation of curves, turns on at least either the left headlight (24) or the right headlight (22) upon passage through a minimum roll angle ( $\alpha$ ).

2. A headlight according to claim 1, wherein either only the left headlight (24) or only the right headlight (22) is turned on during negotiation of a curve, while the other two headlights are turned off.

3. A headlight according to claim 2, wherein when the correction device is activated, the headlights are actuated by the control unit in such a way that the lateral headlights (22, 24) are turned on or off before the central headlight (23) is turned off or on respectively.

4. A headlight according to claim 1, where the headlight unit (13) is provided with at least one central headlight (23) for straight-ahead driving and with lateral headlights (22, 24), one disposed on the right and one on the left thereof, in that, for illumination in left-hand curves and for illumination in right-hand curves respectively, the right headlight (22) and the left headlight (24) respectively are mounted in such a way that they are turned downward around their optical axis, by an angle ( $\beta$ ) to compensate for inclination, thus causing the outside rims remote from the central headlight (23) to be out of horizontal orientation, and in that the correction device includes an electronic control unit, which turns on the central headlight (23) within a driving stretch for substantially upright driving and, during negotiation of curves, turns on either the left headlight (24) or the right headlight (22) with full illuminating power upon passage through a minimum roll angle ( $\alpha$ ), while the respective other two headlights remain turned on with relatively low, non-blinding illuminating power.

5. A headlight according to claim 1, wherein the control unit further comprises a safety circuit, which turns on the lateral headlights (22, 24) with appropriate power distribution if the central headlight (23) fails, and which turns on the central headlight (23) with full power if at least one of the lateral headlights (22, 24) fails.

6. A headlight according to claim 1, wherein the headlights (22, 24) laterally adjoining the central headlight (23) are mounted lower than the middle headlight (23) relative to the upright orientation of the vehicle (1).

7. A headlight according to claim 1, wherein the headlights (22, 24) laterally adjoining the central headlight (23) are each mounted in such a way that they are skewed toward the middle headlight (23), around their axis parallel to the vertical axis (Z) of the vehicle (1), so that their optical longitudinal axes form, together with a middle plane of the vehicle (1) defined by the longitudinal axis (X) and vertical axis (Z), a skew angle ( $\delta$ ).

8. A headlight according to claim 1, wherein the angle ( $\beta$ ) for compensating for inclination is 25 to 35°.
9. A headlight according to claim 1, characterized in that the roll angle ( $\alpha$ ) is 10 to 20°.
10. A headlight according to claim 7, wherein the skew angle ( $\delta$ ) is 4 to 8°, and in that preferably the right headlight (22) in the case of traffic driving on the right and the left headlight (24) in the case of traffic driving on the left is skewed slightly more than the respective other headlight.
11. A headlight according to claim 1, wherein the headlights of the headlight unit are mounted in a common headlight housing (20).
12. A headlight according to claim 11, wherein a sensor unit and the control unit are also installed in the headlight housing (20) or are connected thereto.
13. A headlight according to claim 11, wherein the headlight housing (20) is equipped with three headlight lamps (22, 23, 24), each with multiple reflectors for high and low beams, and with a front lens provided with dispersion sections (21) adapted to the lamps.
14. A headlight according to claim 1, wherein the stabilization device further comprises a sensor unit containing two sensors, one being a longitudinal-axis sensor that measures the vehicle inclination around the longitudinal axis (X), and the other being a vertical-axis sensor that measures the vehicle motion around the vertical axis (Z) during negotiation of a curve, each sensor sending signals proportional to the angular velocity to the control unit.

15. A headlight according to claim 8, wherein the angle ( $\beta$ ) for compensating for inclination is  $30^\circ$ .

16. A headlight according to claim 9, wherein the roll angle ( $\alpha$ ) is  $15^\circ$ .